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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/872,421 | 05/31/2001 | Naotake Mohri | Q64554 | 8462 |

7590 11/03/2004
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3213

EXAMINER

PADGETT, MARIANNE L

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1762

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/872,421

Applicant(s)

MOHRI ET AL.

Examiner

Marianne L. Padgett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-6 & 10-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date 9/22-24/04
- ☐ Notice of Informal Patent Application (PTO-152)
- ☒ Other: Appendix (proposal)

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 2, 2004 has been entered.
2. Applicant's amendments and remarks have overcome the previous 112 problems; removed the obvious double pattern; and overcome the art rejection for the process claims, such that they appear to be allowable over the prior art at this time.
3. Claims 4-6 and 13-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is noted that the use of "interpolated" in lines 2 of these claims can be considered confusing, because this term is generally used in the English language for referring to words in a text or to a mathematical action of estimating a number or value between two others. While its use in the claims is not inconsistent with the dictionary No. 2 definition of "to insert between other things or parts: INTERCALATE", if one considers the gas in the roll of a new thing or part inserted between electrodes as the original parts, but this is not exactly idiomatic. However, the claims would be clarified by using more conventional language for this art, such as --input--, which appears to satisfy the intent.

4. Claims 10-12 are rejected under 35 U.S.C. 102(b) as being Saito et al (08-300,227 A) as discussed in Section 4 of Paper No. 6 and Section 8 of Paper No. 8 (mailed by March 2, 2004).

The device claims, as exemplified by claim 10, consist largely of method limitations, such that lines 4 - 13, as written, do not necessitate any structure in the apparatus, because they are use of materials not necessarily related to the device being claimed. While they can be, they need not be related as written. The last section, starting on line 14, is directed to device features, but still partly method limitation, hence need only have the capability of switching. See attached proposal, which would make applicant's arguments commensurate in scope with the device claims, by tying in the method limitations with the device structure; thus necessitating that structure as part of the claimed device.

5. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al (227 A) as applied to claims 10-12 above, and further in view of Mori (6-246,542 A) or Inoue (63-210,280 A) or Saito et al (U.S. 6,086,684), as discussed in Section 5 of Paper No. 6. See above arguments.

6. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al (227 A) as applied to claims 10-12 above, and further in view of Kagaku et al (10-225,824) or Saito et al (10-512 A) or Toshiba Tungaloy Co (5-216,624 A), as discussed in Paper No. 6 (mailed 4/15/2003), Section 6. Also see above.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne L. Padgett whose telephone number is (571) 272-1425. The examiner can normally be reached on Monday-Friday from about 8:30 a.m. to 4:30 p.m..

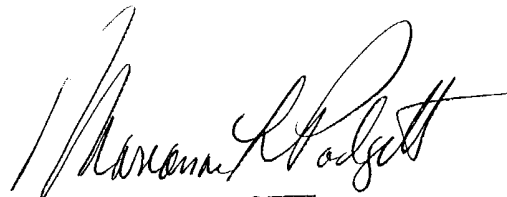
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on (571) 272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M.L. Padgett/dh
October 26, 2004

Nov. 1, 2004



MARIANNE PADGETT
PRIMARY EXAMINER